SPK-TR1

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

Handycam

SPECIFICATIONS

Application	Sony video camera recorder CCD-TR200/TR8/TR8E
Material	Plastic (ABS and PC), glass
Splash-proof	Drip-proof gasket, buckles
Built-in microphone	Stereo
Controlable function	Power on/off, Recording start/stop, Zooming
Dimensions	Approx. 162 × 155 × 240 mm (w/h/d) (6 1/2 × 6 1/4 × 9 1/2 inches)
Mass	Approx. 820 g (1 lb 13 oz) excluding the video camera recorder and the battery pack Approx. 1.64 kg (3 lbs 10 oz) including the video camera recorder CCD-TR200 and the battery pack NP-500
Supplied accessories	Camera mounting shoe (1), Shoulder strap (1), Grease (1), Anti-fogging lens solution (1)
Optional accessory	Sports pack maintenance kit ACC-814S

Disign and specifications subject to change without notice.

PRECAUTIONS

- **Do not leave the sports pack under direct sunlight for a long period of time, as extreme temperatures may cause damage to the equipment.**
- **If you cannot avoid leaving the sports pack under direct sunlight, be sure to cover the pack with a towel or other protection.**
- Avoide opening the sports pack in the sea or at the beach. Preparations such as installing and changing a cassette tape should be made in a place with low humidity and no salty air.
- If the sports pack is taken to a cold place or put in the water after being opened in heat or humidy, moisture condensation may occur, causing the glass to fog up and perhaps damaging the equipmemnt.
- The splash-proof integrity of the sports pack is maintained by the drip-proof gasket and the grooved surface it touches. Be especially careful not to damage or deform those area.
- Be sure to set the STANDBY switch to LOCK after recording, as the power is not turned off automatically in the STANDBY mode.
- Use the pack for no longer than one hour at a time in temperatures of 40°C (104°F). You can use the pack normally at temperatures lower than 35°C (95°F).
- When using the sports pack in cold places, keep the unit in a bag, etc., except when recording pictures, this prevents the unit from getting extremely cold.
- Using the sports pack when the air temperature is freezing point or below is not recommended. But, in unavoidable situations, wrap the unit in something to insulate it.

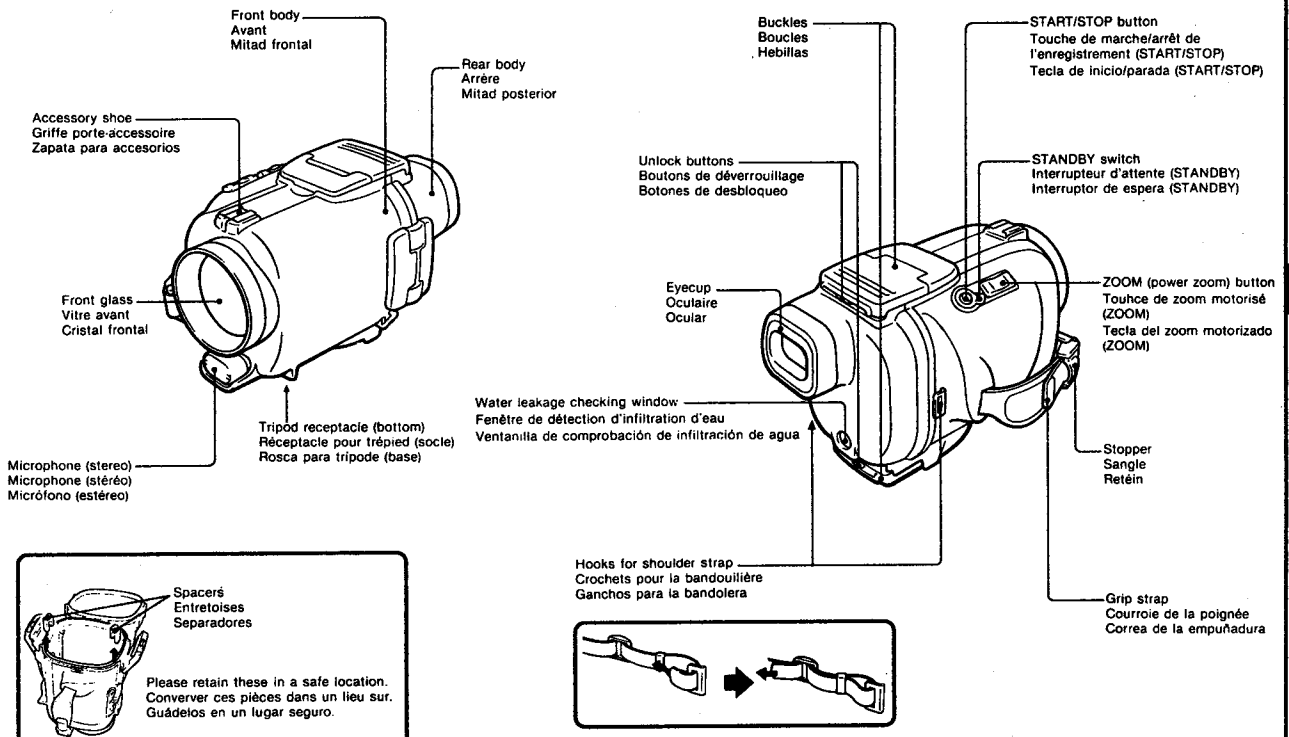
SPORTS PACK

SONY

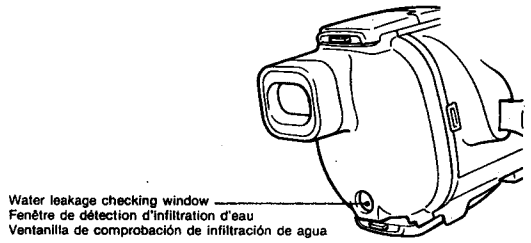
SECTION 1
GENERAL

This section is extracted from instruction manual.

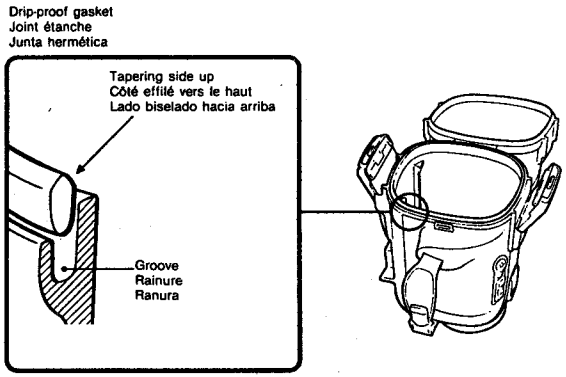
Labeling the Parts and Controls / Nomenclature / Nomenclatura de partes y controles



A


Water leakage checking window
Fenêtre de détection d'infiltration d'eau
Ventanilla de comprobación de infiltración de agua

B



Water Leakage Checking Window

If water happens to leak in, the water leakage checking window turns red. In this case, remove the sports pack from the place exposed to water as soon as possible.
Check the cause of the leakage and take the proper measures. The window will turn white as it dries. Wipe the drops with a tissue or soft cloth to dry it faster.

See illustration A.
Tilt the sports pack as illustrated to check for wate leakage. Any leakage can be checked.
If the camcorder gets wet, take it to the nearest Sony service facility immediately.

Notes on the Drip-proof Gasket

- **Check that there are no scratches or cracks on the drip-proof gasket.**
  Scratches or cracks on the drip-proof gasket may cause water to leak in.
  If there are any, replace the damaged drip-proof gasket with a new one.
  Do not remove the drip-proof gasket from the groove with a metal tool or a tool with a sharp point.
- **Remove foreign materials such as dust, sand or hair from the drip-proof gasket, the groove and from any surface it touches.** If the body is closed with such materials present, these areas may be damaged and water may leak in.
- **Grease the drip-proof gasket.**
  After checking that there are no cracks or dust on the drip-proof gasket, grease it over slightly using a finger.
  During greasing, recheck for cracks or dust. Never use cloth or paper for greasing as the fibers may cling.
  Do not use of any type of grease other than that supplied, as it may damage the drip-proof gasket.
- Put the drip-proof gasket in the grooves evenly, with the tapering side up. Never twist them (See illustration B.)

Replacing the drip-proof gasket
The useful life of the drip-proof gasket depends upon the maintenance and the frequency of use, but we recommend changing it once a year. To replace the drip-proof gasket, use the Sony sports pack maintenance kit ACC-814S (not supplied).

After replacing the drip-proof gasket, check for water leakaga before installing the camcorder.
To do so, close the sports pack without installing the camcorder. Keep the sports pack submerged underwater at a depth of about 15 cm (6 inches) for about 3 minutes and then check the water leakage checking window for water leakage.

When Opening the Sports Pack

To prevent the camcorder from getting wet, dry the sports pack and yourself well.

The supplied anti-fogging lens solution is effective in preventing the front glass and the glass of the eyecup from fogging up.

Uses / Utilisation / Utilización

C

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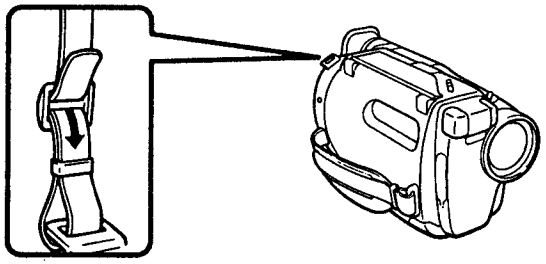

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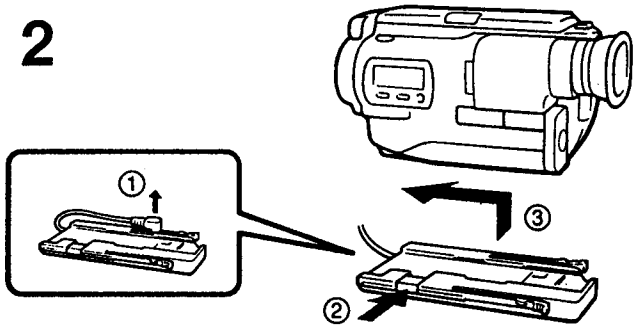

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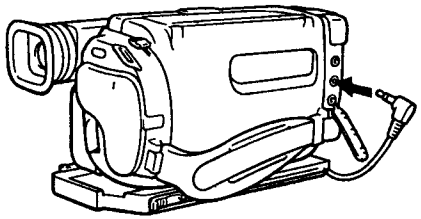

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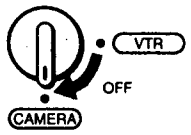

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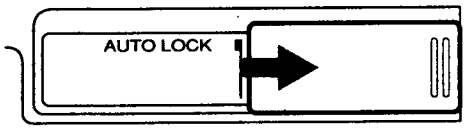

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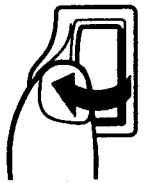

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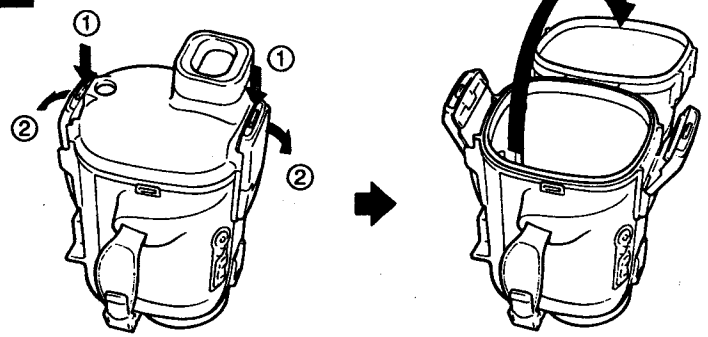

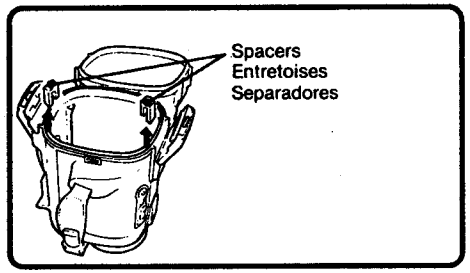

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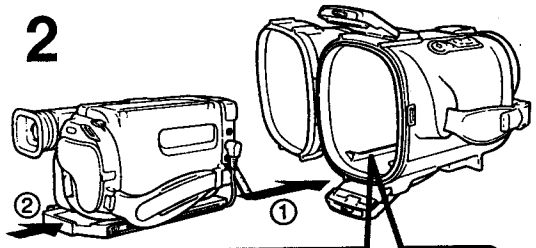
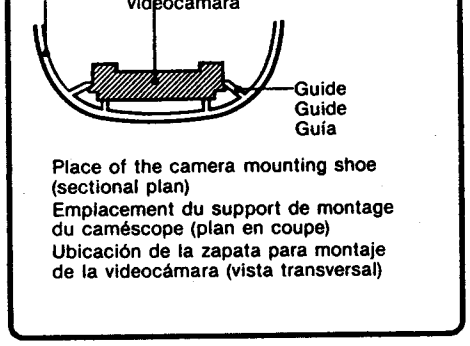
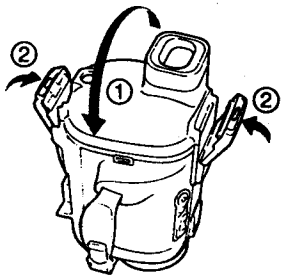




Place of the camera mounting shoe (sectional plan)
Emplacement du support de montage du caméscope (plan en coupe)
Ubicación de la zapata para montaje de la videocámara (vista transversal)

3



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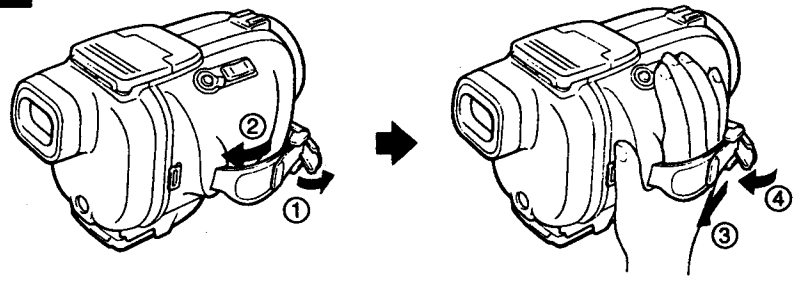
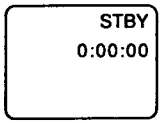


G

1

Inside the viewfinder
Dans le viseur
Interior de visor



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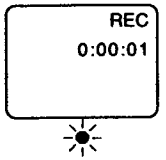

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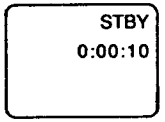

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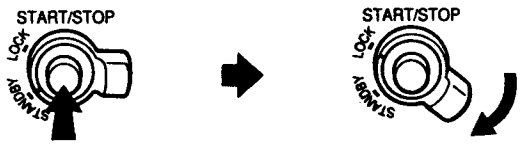

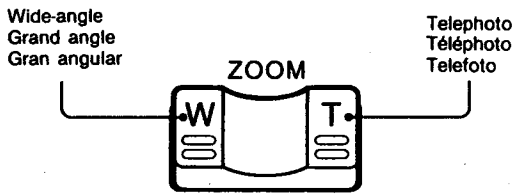

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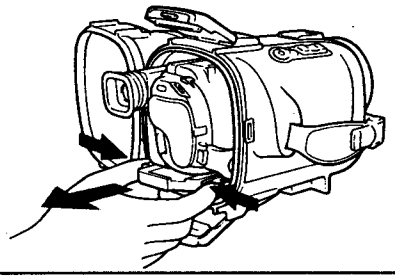

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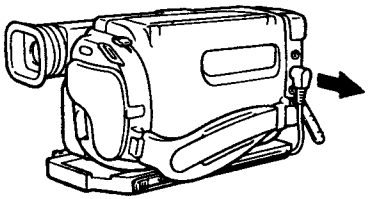

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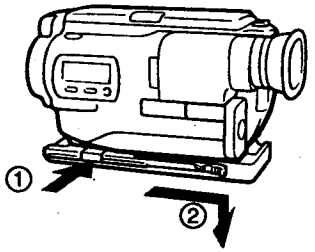

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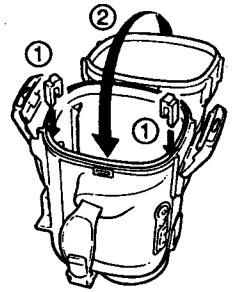


Preparing the Camcorder

See illustration C.

1 **Remove the shoulder strap**
An MC protector or ND filter can be attached to the camcorder when it is installed in the sports pack. However, a camcorder with a conversion lens or other type of filter attached cannot be installed.
2 **Attach the camera mounting shoe to the camcorder.**
(1) Detach the microphone plug from the slit of the camera mounting shoe.
(2) While pressing the release button,
(3) Fit the camera mounting shoe to the bottom of the camcorder, then slide it in the direction of the arrow until it is locked.
3 **Connect he microphone to the MIC jack.**
4 **Install the battery pack to the camcorder.**
5 **Set the cassette tape to be recorded.**
6 **Turn the POWER switch to CAMERA.**
7 **Close the AUTO LOCK cover.**
8 **Open the STANDBY cover.**

Opening the Sports Pack

See illustration D.

(1) While pressing the unlock button,
(2) Release the buckles.
(3) Open the rear body.

Removing the spacers
Remove the spacers as illustrated, and store the removed spacers. When storing the sports pack, attach the spacers again without fastening the buckles.

Installing the Camcorder

See illustration E.

Before closing the sports pack body, check that there is no sand, dust or cracks on the drip-proof gasket or the surface where it touches and grease them slightly.

1 **Turn the viewfinder down until it clicks.**
2 **Install the camcorder.**
(1) Align the camera mounting shoe with the guide on the front body.
(2) Insert the comcorder by pushing the rear of the camera mounting shoe until it clicks.
3 **Close the rear body.**
(1) Securing the rear body.
(2) Fasten the buckles until it clicks.

Adjusting the Grip Strap

See illustration F.

(1) Let the stopper up.
(2) Pull the grip strap to loosen it.
(3) Holding the sports pack so that the tips of your fingers can easily touch the STANDBY switch, START/STOP button and ZOOM button, pull the strap to adjust its length.
(4) Push the stopper down to fasten the strap.

Recording

See illustration G.

1 **Turn the STANDBY switch to STANDBY.**
2 **Press the START/STOP button.**
The recording lamp lights up in the viewfinder, and recording starts.
3 **To stop recording momentarily, press the START/STOP button.**
Press again to resume recording.
4 **To stop recording, press the START/STOP button, and then turn the STANDBY switch to LOCK.**

Zooming
- Keep the **W** side pressed for wide-angle.
- Keep the **T** side pressed for telephoto.

Notes
- Even if you leave the camcorder in the standby mode for 5 minutes or more, the camcorder will not be turned off automatically. Be sure to turn the STANDBY switch to LOCK.
- The zooming speed is fixed.

Removing the Camcorder

See illustration H.

1 **Release the buckles, and open the rear body.**
Refer to "Opening the Sports Pack".
2 **Holding the camera mounting shoe by the knobs on both sides of it, press the knobs and extract the camcorder.**
3 **Disconnect the microphone plug.**
4 **Detach the camera mounting shoe.**
(1) While pressing the release button,
(2) Slide the camera mounting shoe in the direction of the arrow.

Maintenance

After recording

After recording at a location subject to sea breezes, wash the sports pack with fresh water with the buckles fastened thoroughly, then wipe with a soft dry cloth. If water remains on the sports pack, the metal parts may rust.
Clean the inside of the pack with a soft cloth. Do not wash the inside of the pack. Do not use any type of solvent such as alcohol or benzine for cleaning, as this might damaged the finish.

When storing the sports pack

- Close the pack without fastening the buckles to prevent wear of the drip-proof gasket. Use the spacers for storage **(See illustration I).**
- Avoid storing the sports pack in a cold, very hot or humid space, in a place subject to direct sunlight or excessive dust, or together with naphthalene or camphor.

Prerecording Checklist

To make sure that you do not miss good shooting opportunities, go over the following checklist before recording.

Item	Check point
☐ Battery pack	• Fully charged
☐ Video cssette tape	• Inserted into the camcorder • Tape length will cover the planned recording time. • The tape is wound to the point where recording is to begin. • The safety tab on the cassette is slid in. (The window is not red.)
☐ Microphone plug	• Fully inserted into the MIC jack of the camcorder
☐ POWER switch of the camcorder	• Set to CAMERA.
☐ AUTO LOCK cover	• Close to activate the automatic adjustment function.
☐ **Drip-proof gasket**	• **No scratches or cracks** • **Correctly set in the groove**
☐ Buckles	• Correctly fastened

1. Concerning Defects

Sports Pack defects are classified as the three following types.

1) Operational defects

This type mainly involves malfunctions caused by electrical circuit or parts defects. Repair is the same as for normal products.

2) Damaged and missing parts

Waterproofing is sometimes affected by the locations of defects and symptoms. Before making repairs, always use the check list to check the type of defect.

Note:Refer to pages 9 and 10 for the check list.

3) Water leaks

After the discovery of a defect or after making repairs,it is necessary to perform either a hydraulic pressure test or simple water leak test using a water tank.

2. Concerning Water Leaks

To ensure waterproofing. O-rings are used in the holes in the Sports Pack housing for openings,box operation and the front glass. Water leaks are possible in any of these locations but the conditions under which water leaks occur differ for the openings and the other parts.

1) Water leaks at openings

Openings are waterproofed using O-rings compressed by the force of the buckle.

Near the surface of the water. where little water pressure is applied to Sports Pack. the force of the buckle alone provides sufficient waterproofing. As the water pressure applied to Sports Pack increases at greater depths. however, the force applied to the O-rings increases due to the water pressure to increase the waterproofing.

Because of this, due to the type of waterproofing construction used, opening water leaks are more prone to occur in shallow water (approx, 2 meters) than in deep water.

Also, since there are is a gap between the front and rear housing, sand and dirt tend to enther and adhere to the O-ring in shallow water.

When the cover is opened, this sand and dirt can then enter under the O-ring and cause a water leak the next time Marine Pack is used.

This, most water leaks in the openings are the result of adhered dirt. sand, hair and other foreigh matter as well as O-ring and housing damage due to careless handing.

2) Water leaks at other openings

Parts where there are holes in the housing (Stand-by lever, front and rear glass) are constructed with O-rings mechanically compressed by screws and nuts.

Due to the construction, these places cannot be reached with the hands : therefore, the waterproofing is more secure than that of the openings.

The causes of water leaks are damage of the parts compressing the O-rings, loosening of the screws and nuts fastening the parts and improper reassembly.

3. Water Leak Check Methods

After the discovery and repair of a water leak, it is necessary to perform a hydraulic pressure test and water leak test using a water tank.

1) Opening water leak check method

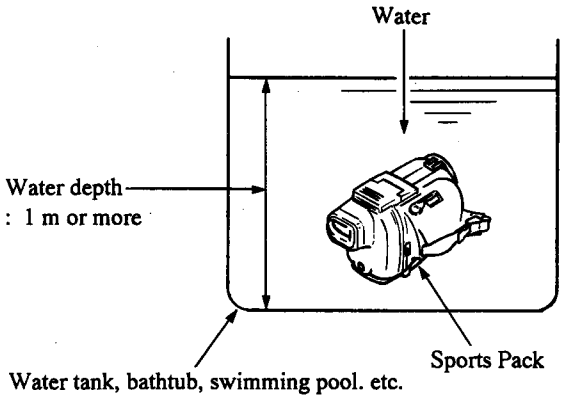
As was mentioned above, due to the construction. water leaks in openings are more prone to occur in shallow water than in deep water. Consequently, a simple water leak test using a water tank is sufficient in many cases.

without performing a hydrautic pressure test.

***Water leak test**

In this method. Sports Pack immersed in a tank filled with water and checked for water leaks.

Sports Pack should be left immersed in the water tank (or bathtub, swimming poll, etc.)for at least 15-20 minutes with the covers closed. The water depth should be at least 1 meter.



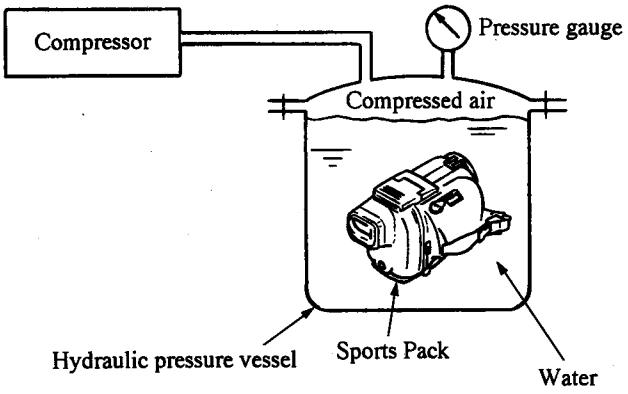
2) Water leak check methods for other waterproofed locations.

In addition to water leads caused by damaged parts and loose screws. There are also water leaks at other waterproofed iocations which cannot be detected with a water leak test : therefore, the hydraulic pressure test must be used.

****Hydraulic pressure test**

In this test. Sports Pack is immersed in a water tank called a hydraulic pressure vessel, pressure is applied using compressed air and checks are made for water leaks and the ability to withstand water pressure is tested.

Extreme pressure is applied to Sports Pack underwater. Water leaks may occur when this pressure is first applied. In such cases, the water leak check must be made using the hydraulic pressure test with a hydraulic pressure vessel.



4. Causes of Water Leaks(excluding parts damage)

- **Water leaks In openings**

1) When the covers have been closed with sand, dirt and hair adhered to the O-rings, O-ring grooves, housing O-ring contact surface or waterproof packing.
2) When the cover is closed with an O-ring out of its groove or a cord is caught in the cover.
3) When an O-ring is damaged or cracked(aging).
4) When there is a long scratch which crosses the housing O-ring contact surface.
5) When a cover is not tightly closed due to a defective buckle.

- **Water leaks at other waterproofed locations.**

6) When there are scratches on the surfaces of the parts which compress the O-rings.
7) When the Parts which compress are loose.
8) When tightening with sand, dirt and hair adhered to O-ring or part which compresses the O-ring.
9) When an O-ring has not been installcd.

Causes 1)-5) and 9)above can be discovered relatively easily using the water leak test describcd above.

5. Water Leak Repair Methods

- **Relatively light scratches on O-ring contact surfaces can often by repaired by polishing.**

Caution should be exercised concerning the following points.

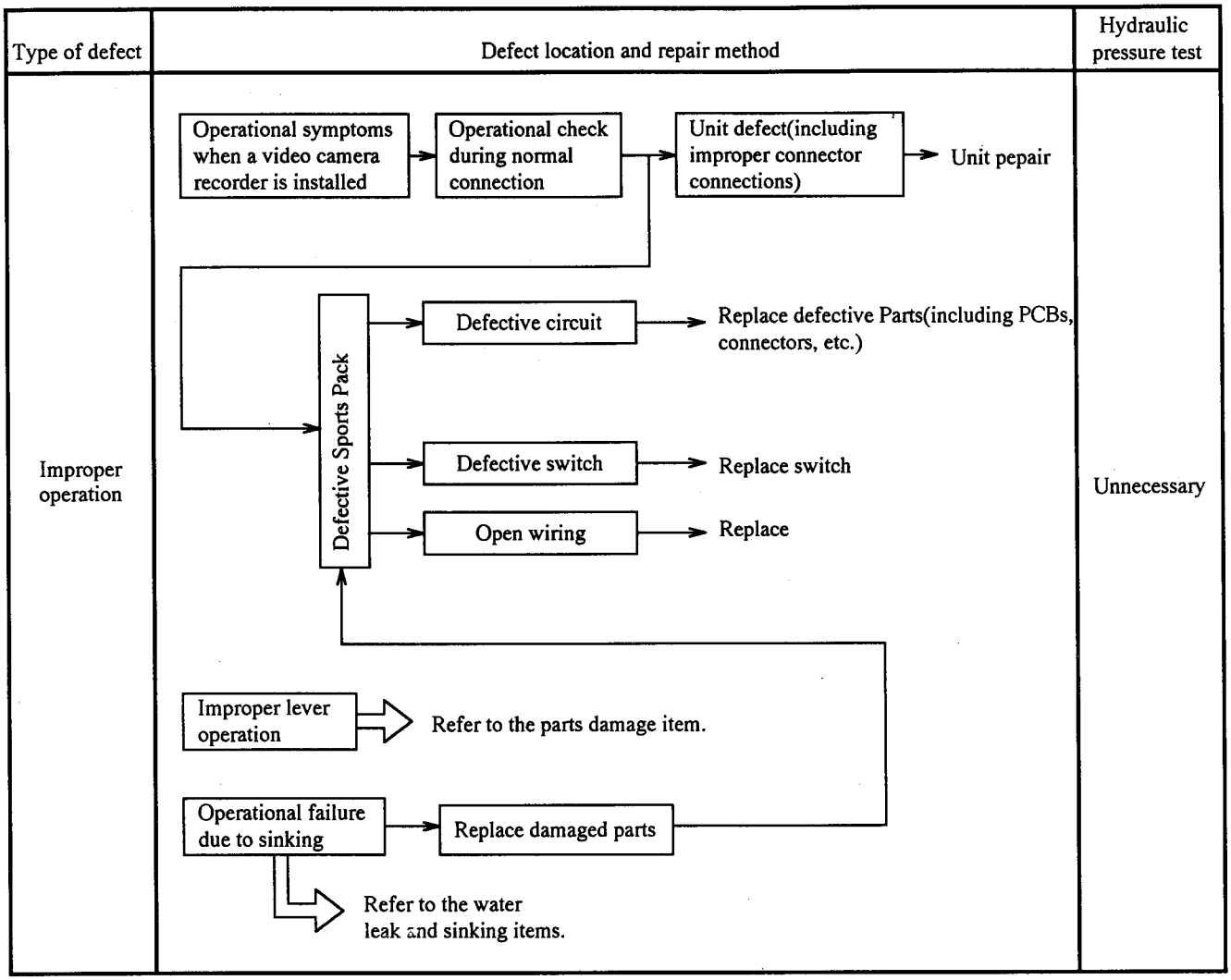
1) Only extermely tight scratches can be repaircd.
2) Use number 600-1000 waterproof sandpaper for repairs and apply water while polishing.
3) Polish the scratch arca smoothly using care not to create local indentations.
4) Do not use putty to make repairs since such repairs will fail under water pressure.

- **Checks and cautions**

1) Make sure that there are no scratches on the housing O-ring contact surfaces.
2) Make sure that there are no scratches or cracks in the O-rings.
3) Always coat the O-rings with grease by hand and make sure that the O-rings are not twisted when installed.

6. Repair Location and Hydraulic Pressure Test

When a defect is discovered or a repair is made at a location related to the waterproofness of Marine Pack.
The hydraulic pressure test must be periormed.
Repairs at locations which require the hydraulic pressure test, and the hydraulic pressure test itself. Are periormed at the factory : thereiore, always check the type of defect using the check list before making repairs.



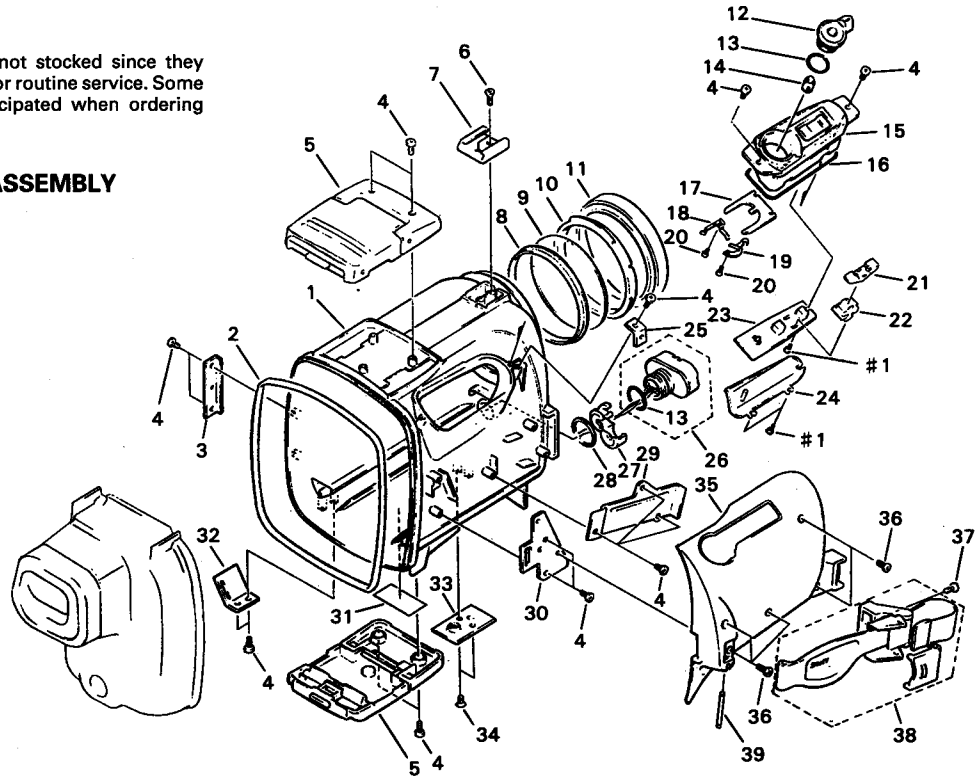
Type of defect		Defect location/symptom		Repair method	Hydraulic pressure test
Parts damage	Housing related	Exterior part damage	Scratch	Replace part	Necessary
		Cabinet packing	Light damage	Polish using waterproof sandpaper	Necessary
			Heavy damage	Replace part	
		O-ring	Scratch, aging	Replace part	Necessary
		Buckle	Damage	Replace part	Necessary
	Front glass section	Front protector	Damage, loss	Replace part	Necessary
		Glass window	Damage	Replace part	Necessary
		Front glass	Damage	Replace part	Necessary
	Rear glass section	Rear Protector	Damage, loss	Replace part	Necessary
		Water leak detector window	Damage	Replace part	Necessary
		Wide-angle conversion lens	Damage	Replace part	Necessary
	Standby lever section	Standby lever	Damage	Replace part	Necessary
		O-ring	Scratch	Replace part	Unnecessary
Operation impossible	Switches	LS-37 board	Inproper operation	Replace part	Necessary
Voice cannot be recorded	Microphone related	Built-in microphone	Damage	Replace part	Necessary
		O-ring	Scratch	Replace part	Necessary
Sinking due to water leak	Determine cause using the hydraulic pressure test.			Repair the defect or replace the part	Necessary

SECTION 3
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked"*"are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.

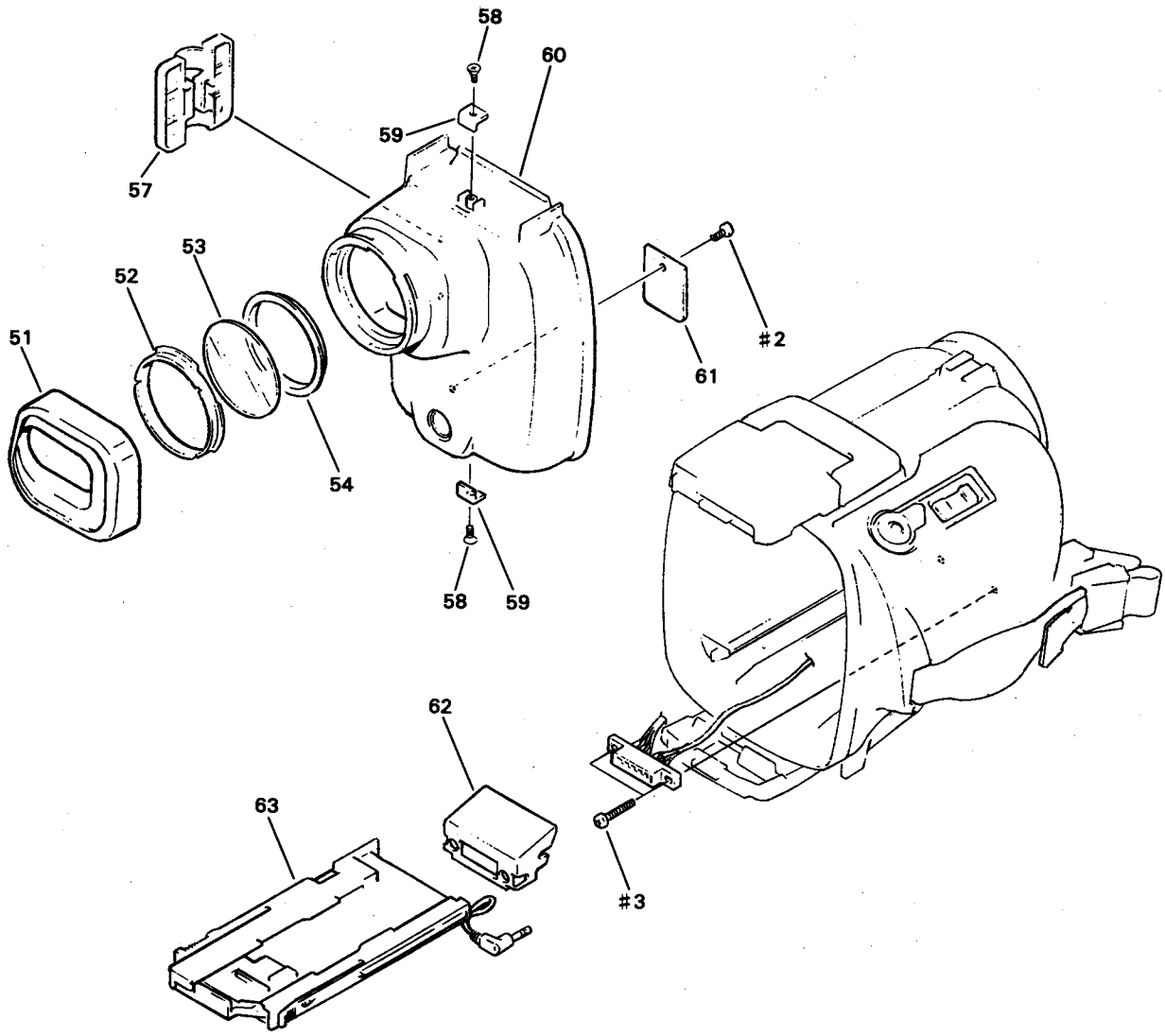
(1) FRONT CASE ASSEMBLY



Ref. No.	Part No.	Description	Remarks
1	/ 3-952-043-01	CASE, FRONT (YELLOW)	
1	/ 3-952-043-11	CASE, FRONT (GRAY)	
2	/ 3-952-023-01	PACKING, CABINET	
4	3-951-813-11	SCREW, TPBO +K 2X6 TYPE 2	
5	A-6768-961-A	BUCKLE BLOCK ASSY (YELLOW)	
5	A-6768-981-A	BUCKLE BLOCK ASSY (GRAY)	
6	3-951-813-11	SCREW, TPBO +K 2X6 TYPE 2	
7	3-724-511-11	SHOE, ACCESSORY	
8	/ 3-952-045-01	PACKING, LENS WINDOW 726	
9	/ 3-952-047-01	WINDOW, LENS 726	
10	/ 3-952-044-01	RETAINER, LENS WINDOW 726	
11	3-952-024-01	COVER, LENS WINDOW 726	
12	/ 3-952-029-01	LEVER, STANDBY (YELLOW)	
12	/ 3-952-029-11	LEVER, STANDBY (GRAY)	
13	/ 3-951-807-11	RING, O	
14	*3-952-030-01	BUTTON, REC	
15	3-952-028-01	OPERATION BOX	
16	/ 2-115-924-12	RING, O	
17	*3-952-031-01	STOPPER	
18	*3-952-035-01	BOARD, SS LEVER	
19	*3-952-032-01	BOARD, SPRING	
20	4-908-792-31	TPBO, B2 (M2X4)	
21	3-943-737-01	LEVER, TW (B)	
22	*3-952-033-01	HOLDER, LEVER, TW	
23	*A-6766-407-A	LS-37 BOARD COMPLETE	
24	*3-952-036-01	LID, OPERATION BOX	
25	*3-952-057-01	STOPPER B GRIP	
26	/ A-6768-962-A	MICROPHONE BLOCK ASSY (YELLOW)	
26	/ A-6768-982-A	MICROPHONE BLOCK ASSY (GRAY)	
27	3-952-051-01	RETAINER, MICROPHONE	
28	/ *3-952-052-01	PACKING MICROPHONE	
29	*3-952-053-01	FIXED BOARD, GRIP	
30	*3-952-056-01	STOPPER GRIP A	
31	3-703-034-11	LABEL, HIGH TEMPERATURE INFORMATION	
32	*3-952-054-01	FIXED BOARD, SHOULDER	
33	2-115-831-01	SCREW	
34	3-951-814-01	SCREW, TPBO +K 2.6X10 TYPE 2	
35	3-952-055-01	COVER, GRIP	
36	3-951-812-01	+B 2.6X6	
37	3-951-812-11	+B 2.6X6	
38	3-952-049-01	BELT, GRIP	
39	3-952-050-01	SHAFT, GRIPBLT STOPPER	

Note:
Items marked " / " are parts in relation to waterproof.
Replace these components with Sony parts.
Be sure to check up waterproofing after repair.

(2) REAR CASE ASSEMBLY



Ref. No.	Part No.	Description	Remarks
51	3-952-025-01	EYE CUP	
52	3-952-062-01	RETAINER WINDOW 506	
53	! 3-952-064-01	WINDOW, EYEPIECE 506	
54	! 3-952-063-01	PACKING WINDOW 506	
57	3-952-022-01	HINGE (YELLOW)	
57	3-952-022-11	HINGE (GRAY)	
58	3-951-813-01	SCREW, TPBO +K 2X4 TYPE 2	
59	*3-952-061-01	PLATE, LOCK, BACKLE	
60	! 3-952-059-01	CASE, REAR (YELLOW)	
60	! 3-952-059-11	CASE, REAR (GRAY)	

Ref. No.	Part No.	Description	Remarks
61	*3-952-060-01	PLATE, LEAK	
62	*3-952-048-01	COVER, CONNECTOR (YELLOW)	
62	*3-952-041-01	COVER, CONNECTOR (GRAY)	
63	A-6768-964-A	BASE, ASSY	

Note:
Items marked "!" are parts in relation to waterproof.
Replace these components with Sony parts.
Be sure to check up waterproofing after repair.

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked"*"are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: µF, PF: µµF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH : mH, UH: µH

SEMICONDUCTORS
In each case, U: µ, for example:
UA...: µA..., UPA...: µPA...,
UPC...: µPC, UPD...: µPD...

Note:
Items marked "/" are parts in relation to waterproof.
Replace these components with Sony parts.
Be sure to check up waterproofing after repair.

Ref. No.	Part No.	Description	Remarks
	*A-6766-409-A	DZ-1 BOARD	
		**********	
	*1-951-263-11	CONNECTOR HARRNES, BASE	
**********			
	*1-649-727-11	MC-99 BOARD	
		**********	
R101	1-249-428-11	METAL GLAZE CHIP 8.2K 1/4W 5%	
R102	1-249-428-11	METAL GLAZE CHIP 8.2K 1/4W 5%	
	1-564-719-11	CONNECTOR	
**********			
	1-646-726-11	LS-37 BOARD	
		**********	
	1-564-705-11	3P CONNECTOR	
		< CAPACITOR >	
C1	1-124-779-00	ELECT 10MF 5% 16V	
C2	1-163-033-00	CERAMIC, CHIP 0.022MF 50V	
C3	1-163-105-00	CERAMIC, CHIP 30PF 5% 50V	
C4	1-163-105-00	CERAMIC, CHIP 30PF 5% 50V	
C5	1-124-779-00	ELECT 10MF 20% 16V	
C6	1-124-779-00	ELECT 10MF 20% 16V	
C7	1-124-779-00	ELECT 10MF 20% 16V	
C8	1-124-778-00	ELECT 22MF 20% 16V 6.3V	
		< DIODE >	
D1	8-719-820-05	DIODE 1SS181	
D2	8-719-820-05	DIODE 1SS181	
D4	8-719-820-05	DIODE 1SS181	
D6	8-719-820-05	DIODE 1SS181	
D9	8-719-106-53	DIODE RD10M-B2	
		< IC >	
IC1	8-759-512-69	IC S-81350HG-KD	
IC2	8-759-998-11	IC MSM6411A-75GS-VK	
		< TRANSISTOR >	
Q2	8-729-901-03	TRANSISTOR DTC144WK	
Q3	8-729-901-01	TRANSISTOR DTC144EK	
Q4	8-729-901-01	TRANSISTOR DTC144EK	
Q5	8-729-230-49	TRANSISTOR 2SC2712L-TE85L	
Q6	8-729-901-01	TRANSISTOR DTC144EK	
Q7	8-729-216-22	TRANSISTOR 2SA1162-G	
		< RESISTOR >	
R1	1-216-073-00	METAL GLAZE 10K 1/10W	
R2	1-216-073-00	METAL GLAZE 10K 1/10W	
R3	1-216-073-00	METAL GLAZE 10K 1/10W	
R4	1-216-121-00	METAL GLAZE 1M 1/10W	
R5	1-216-073-00	METAL GLAZE 10K 1/10W	
R7	1-216-097-00	METAL GLAZE 100K 1/10W	
R8	1-216-097-00	METAL GLAZE 100K 1/10W	
R9	1-216-097-00	METAL GLAZE 100K 1/10W	
R10	1-216-097-00	METAL GLAZE 100K 1/10W	
R11	1-216-097-00	METAL GLAZE 100K 1/10W	
R12	1-216-101-00	METAL GLAZE 150K 1/10W	
R13	1-216-097-00	METAL GLAZE 100K 1/10W	
R14	1-216-073-00	METAL GLAZE 10K 1/10W	
		< SWITCH >	
SW1	1-692-406-11	LEAF, SWITCH (STANBY)	
SW2	1-572-683-21	TACT, SWITCH (REC START/STOP)	
SW3	1-553-479-00	TACT, SWITCH (W)	
SW4	1-553-479-00	TACT, SWITCH (T)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-104-19	SCREW, TPBO +P 2X6, TYPE 2 (NO GROOVE)	
#2	7-685-104-24	SCREW, TPBO +P 2X6, TYPE 2 (GROOVE)	
#3	7-685-651-79	SCREW, TPBO +P 3X20, TYPE 2 (NO GROOVE)	
**********			
		ACCESSORIES AND PACKING MATERIALS	
		**********	
Part No.	Description		Remark
2-115-291-01	GREASE		
3-756-215-21	MANUAL, INSTRUCTION (ENGLISH/DUTCH/ITALIAN/FRENCH/GERMAN/SPANISH/ARABIC/SWEDISH) (EXCEPT/US/Canadian MODEL)		
3-756-215-41	MANUAL, INSTRUCTION (ENGLISH/FRENCH/SPANISH) (US/Canada MODEL)		
3-941-348-01	PACKING, SPACER		
3-941-465-11	BELT, STRAP		
3-943-913-01	ANTI-FOG KIT		
**********			

9-973-300-11

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